

April 5, 2019

Zach Dreher P.O. Box 538 Black Eagle, MT 59414

Dear Mr. Dreher:

Montana Air Quality Permit #3315-03 is deemed final as of April 5, 2019, by the Department of Environmental Quality (Department). This permit is for a portable concrete plant and asphalt plant. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

Conditions: See attached.

For the Department,

Julie A. Merkel

Permitting Services Section Supervisor

Julis A Merkel

Air Quality Bureau

(406) 444-3626

Rhonda Payne

Air Quality Specialist

Air Quality Bureau (406) 444-5287

JM:RP Enclosures

Montana Department of Environmental Quality Air, Energy & Mining Division

Montana Air Quality Permit #3315-03

Missouri River Trucking & Excavating Inc. dba MRTE, Inc. P.O. Box 538 Black Eagle, MT 59414

April 5, 2019



MONTANA AIR QUALITY PERMIT

Issued To: Missouri River Trucking & MAQP: #3315-03

Excavating Inc. Application Complete: 1/9/2019

dba MRTE, Inc. Preliminary Determination Issued: 2/15/2019 P.O. Box 538 Pepartment's Decision Issued: 3/20/2019

Black Eagle, MT 59414 Permit Final: 4/5/2019

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Missouri River Trucking & Excavating Inc. (MRTE) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

MRTE operates a portable concrete plant and asphalt plant, which will initially be located at 3115 Rainbow Dam Road, Section 32, Township 21 N, Range 4 East, in Cascade County, Montana. However, MAQP #3315-03 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Current Permit Action

On January 9, 2019, the Department received an application from MRTE to modify MAQP 3315-02 to add a portable drum mix asphalt plant up to 200 tons per hour (TPH) maximum production capacity. A complete list of permitted equipment is contained in Section I.A of the permit analysis. MAQP #3315-03 makes the requested change and updates the permit to reflect current Department language, rule references, and federal emission standards for affected equipment.

SECTION II: Conditions and Limitations

A. Emission Limitations

- 1. MRTE shall install, operate, and maintain the baghouse and rubber boot load-out spout as specified in their Montana Air Quality Permit and all supporting documentation (ARM 17.8.752):
 - a. MRTE shall install, operate, and maintain the baghouse on the weigh hopper, cement silo, and cement supplement silo; and
 - b. MRTE shall install, operate, and maintain the rubber boot load-out spout on the concrete plant for product loadout.

- 2. MRTE shall not cause or authorize to be discharged into the atmosphere from the ready-mix plant or asphalt plant:
 - a. Any visible emissions from any non-New Source Performance Standard (NSPS) affected equipment that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
 - b. Any fugitive emissions from the source, or from any material transfer operations, including, but not limited to, truck loading or unloading, which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
 - c. Any stack emissions from the asphalt plant that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.752, ARM 17.8.340 and 40 CFR 60 Subpart I).
 - d. Any visible emissions from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.752, ARM 17.8.340, and 40 CFR 60 Subpart I).
- 3. MRTE shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
- 4. MRTE shall treat all unpaved portions of the haul roads, access roads, parking lots, and the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions requirement in Section II.A.3 (ARM 17.8.752).
- 5. Total concrete batch plant production shall be limited to 438,000 cubic yards of concrete during any rolling 12-month time period (ARM 17.8.749).
- 6. If the permitted equipment is used in conjunction with any other equipment owned or operated by MRTE, at the same site, production shall be limited to correspond with an emissions level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 7. MRTE shall inspect the baghouse and its vents, which are used for controlling emissions from the silos and weigh hopper, every 6 months of operation to ensure that each collector is operating at the optimum efficiency. Records of inspections, repairs, and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).

- 8. MRTE shall maintain on-site records of inspections, repairs, and maintenance. All records compiled in accordance with this permit shall be maintained by MRTE as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the Department upon request, and shall be available at the plant site for inspection by the Department (ARM 17.8.749).
- 9. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf) (ARM 17.8.752, ARM 17.8.340 and 40 Code of Federal Regulations (CFR) 60 Subpart I).
- 10. MRTE shall install, operate, and maintain a baghouse for control of particulate matter per the manufacturer's recommendations. A device to measure the pressure drop (magnahelic gauge, manometer etc.) on the control device (baghouse) must be installed and maintained. Pressure drop must be measured in inches of water (ARM 17.8.749 and ARM 17.8.752).
- 11. MRTE shall be limited to a maximum of 420,000 tons of asphalt production during any rolling 12-month period (ARM 17.8.749 and ARM 17.8.1204).
- 12. The asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
- 13. Operation of the hot-mix asphalt plant shall not exceed 2,100 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 14. MRTE shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities (ARM 17.8.340 and 40 CFR 60, Subpart I).

B. Testing Requirements

- 1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Methods 1-5 and Method 9 source test shall be performed on the asphalt drum mix dryer exhaust stack to demonstrate compliance with Sections II.A.2.c and II.A.9. Testing shall continue an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105, ARM 17.8.340, ARM 17.8.749, and 40 CFR 60, Subpart I). Additional testing may be required by 40 CFR 60, Subpart I (ARM 17.8.340 and 40 CFR 60, Subpart I).
- 2. Since asphalt production will be limited to the average production rate during the compliance source test, it is suggested that the test be performed at the highest practical production rate (ARM 17.8.749).
- 3. Pressure drop across the baghouse must be recorded at least once daily whenever the asphalt plant is operated and kept on site according to Section II.A.10 (ARM 17.8.749).

- 4. Pressure drop across the baghouse must be recorded during the compliance source test and reported as part of the test results (ARM 17.8.749).
- 5. MRTE may retest at any time to test at a higher production rate (ARM 17.8.749).
- 6. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 7. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this concrete batch plant or asphalt plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
- 2. MRTE shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emission inventory request. The request will include, but is not limited to, all sources identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.
- 3. MRTE shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 4. MRTE shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

- 5. MRTE shall maintain records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by MRTE as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).
- 6. MRTE shall document, by month, the total concrete plant production from the facility. By the 25th day of each month, MRTE shall total the concrete production from the facility for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.5. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 7. MRTE shall document, by month, the total plant production of asphalt in tons. By the 25th day of each month, Knife River shall total the production of asphalt for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 8. MRTE shall annually certify that its emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

- 1. Within 30 days of commencement of construction of any New Source Performance Standard (NSPS)-affected equipment, MRTE shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart I).
- 2. Within 15 days of the actual start-up date of any NSPS-affected equipment, MRTE shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart I).
- 3. Within 15 days of the actual start-up date of any non-NSPS-affected equipment, MRTE shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection MRTE shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emissions Rate Monitoring System (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if MRTE fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving MRTE of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, et seq. (ARM 17.8.756)
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the permitted source.
- G. Air Quality Operation Fees Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by MRTE may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

J. MRTE shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis Missouri River Trucking & Excavating, Inc. MAQP #3315-03

I. Introduction/Process Description

Missouri River Truck & Excavating, Inc. (MRTE) owns and operates a portable truck mix concrete batch plant.

Permitted Equipment

The following list of permitted equipment is provided for reference, as portions of MAQP #3315-03 are written de minimis friendly, whereby operational flexibility is provided so that alternate equipment may be utilized if maximum permitted capacities are not exceeded. See Section II of the MAQP for specific equipment limitations and/or conditions. Operations at MRTE include the following equipment:

- Electrically-powered 1970 Rex, Model JR-S-107 concrete batch plant (maximum capacity of 50 cubic yards per hour) controlled by a fabric filter dust collector
- Weigh hopper, cement and cement supplement silo, controlled by a rubber boot load-out spout
- Electrically-powered 1990 Almix 8032 parallel flow drum mixer with baghouse for particulate control
- Electrically-powered Hauck Star Jet burner, Model SJO-4260
- Hy-Way hot oil heater
- Associated tanks, conveyors and transfer points

B. Source Description

MRTE's home pit is located at Section 32, Township 21 North, Range 4 East, Cascade County, (-111.257817, 47.538457), Montana.

C. Permit History

The Department issued **MAQP** #3351-00 to Blahnik on May 12, 2004. MAQP #3351-00 allowed the operation of an electrical powered 1999 American Built Truck Mix Concrete Batch Plant (maximum capacity of 150 cubic yards per hour) and associated equipment.

On March 24, 2006, the Department received notification that Blahnik was replacing the existing batch plant, a 1999 American Built Truck Mix Concrete Batch Plant, with a 1970 Rex Concrete Batch Plant. When applying for MAQP #3315-00, Blahnik believed the American Built plant would be used, but the Rex plant was used instead. The permit action reflected the equipment change and updated the permit to reflect permit language used by the Department. **MAQP #3315-01** replaced MAQP #3315-00.

The Department received correspondence from Blahnik of the sale of the portable concrete batch plant to Missouri River Trucking & Excavating, Inc. (MRTE). MRTE also provided correspondence acknowledging the sale and an Intent to Transfer form for updating the location. MRTE also provided an affidavit of publication of public notice in the *Great Falls Tribune* for the change in location. The portable concrete batch plant moved to Section 32, Township 21 North, Range 4 East in Cascade County, Montana (-111.257818, 47.538457). The permit administrative action reflected the new ownership and location in accordance with ARM 17.8.764 and 17.8.765. **MAQP # 3315-02** replaced MAQP #3315-01.

D. Current Permit Action

On January 9, 2019, the Department received an application from MRTE to modify MAQP 3315-02 to add a portable drum mix asphalt plant up to 200 tons per hour (TPH) maximum production capacity. A complete list of permitted equipment is contained in Section I.A of the permit analysis. MAQP #3315-03 makes the requested change and updates the permit to reflect current Department language, rule references, and federal emission standards for affected equipment.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

- 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).
 - MRTE shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
 - 11. ARM 17.8.230 Fluoride in Forage

MRTE must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate

- matter. (2) Under this rule, MRTE shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
- 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section
- 4. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
- 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
- 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank tuck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
- 7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted by MRTE, the portable drum mix-asphalt plant and associated equipment are subject to NSPS (40 CFR 60), as follows:
 - a. 40 CFR 60, Subpart A General Provisions. This subpart applies to all equipment or facilities subject to an NSPS subpart as listed below:
 - b. 40 CFR 60, Subpart I Standards of Performance of Hot Mix Asphalt Facilities. For an asphalt plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by MRTE, the asphalt plant equipment to be used under MAQP #3315-03 is subject to this subpart because the source is a hot mix asphalt facility.
- 8. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
- 9. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. MRTE submitted the appropriate permit application fee for the current permit action

- 10. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.
 - An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.
- D. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. MRTE has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) and carbon monoxide (CO); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. MRTE submitted the required permit application for the current permit application. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. MRTE submitted an affidavit of publication of public notice for the December 27, 2018 issue of the *Great Falls Tribune*, a newspaper of general circulation in the city of Great Falls, Cascade County, MT.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule

- also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving MRTE of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
- 10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. <u>ARM 17.8.762 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions because of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- E. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

- F. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3315-03 for MRTE, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.

- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM_{10} nonattainment area.
- d. This facility is subject to a current NSPS (40 CFR 60, Subpart I).
- e. This facility is not subject to any current NESHAP standards.
- f. This source is not a Title IV affected source
- g. This source is not a solid waste combustion unit.
- h. This source is not an EPA designated Title V source.

MRTE requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, if the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

- a. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3)(a) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or modified source. MRTE shall install on the new or modified source the maximum air pollution control capability which is technologically practicable and economically feasible, except that BACT shall be utilized.

A. Asphalt Drum Mixer

The Department reviewed relevant control options, as well as previous BACT determinations. The following control options were reviewed by the Department to make the following BACT determinations:

- · Fabric Filter Baghouse
- · Electrostatic Precipitator
- · Cyclone
- · Wet Scrubber

All the listed technologies are deemed technically feasible for this application. Technical feasible control options, in order the highest control efficiency to the lowest control efficiency base on PM control are as follows:

- 1. Fabric Filter Baghouse (99 99.9% efficient) (EPA Fact Sheet EPA-452/F-03-025, 07/15/03)
- 2. Electrostatic Precipitator (99 99.9% efficient) (EPA Fact Sheet EPA-452/F-03-028, 07/15/03)
- 3. Cyclone (up to 99% efficient) (EPA Fact Sheet EPA-452/F-03-005, 07/15/03)
- 4. Wet Scrubber (70 greater than 99% efficient) (EPA Fact Sheet EPA-452/F-03-0017, 07/15/03)

MRTE has proposed to use a baghouse for the control of PM from the exhaust of the parallel flow drum mixer. Because MRTE proposes to use the highest rated control device (baghouse), no further economic analysis is needed. The control option selected has control technology and a control cost comparable to other recently permitted similar sources and is capable of achieving the appropriate emissions standards. Operating and maintaining a baghouse will constitute BACT for the asphalt drum mixer. All asphalt drum mixer emissions are limited to 0.04 grains per dry standard cubic foot (gr/dscf) for particulate and 20 percent opacity, which is consistent with 40 CFR 60, Subpart I. MRTE shall install and operate a device to measure the pressure drop (magnehelic gauge, manometer, etc.) across the baghouse.

B. Fugitive Emissions

MRTE must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary. Using water and/or chemical dust suppressant to comply with the reasonable precautions limitation will be considered BACT.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Source	Tons/Year					
	PM	PM-10	NOx	CO	SOx	VOC
Aggregate Delivery to Ground Storage	0.705	0.34				
Sand Delivery to Ground Storage	0.164	0.05				
Aggregate Transfer to Conveyor	0.705	0.34			-	
Sand Transfer to Conveyor	0.164	0.05				
Aggregate Transfer to Elevated Storage	0.705	0.34				
Sand Transfer to Elevated Storage	0.164	0.05				
Cement Unloading to Elevated Storage Silo	0.039	0.025				
Cement Supplement Unloading to Elevated Storage Silo	0.025	0.009				
Weigh Hopper Loading of Sand/Aggregate	0.92	0.43				
Central Mix Loading of	46.49	16.48				
Cement/Supplement/Sand/Aggregate						
Haul Roads	2.74	1.23				
200 TPH Drum Mix Asphalt Plant Dryer	18.33	4.83	11.55	27.30	12.18	6.72
Cold Aggregate Storage Piles	6.95	3.29				
Cold Aggregate Handling/Conveyors	0.37	0.12				
Cold Aggregate Screens	0	0				
Asphalt Product Silo Filling	0.51	0.51				
Batch Mix Plant Load-Out	1.83	0.72		1.18		
Total	80.81	28.81	11.55	28.48	12.18	6.72

**CO = carbon monoxide PM = particulate matter

(fil) = filterable PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less

 $\begin{aligned} \text{HAPs} &= \text{hazardous air pollutants} & \text{SO}_2 &= \text{sulfur dioxide} \\ \text{hp} &= \text{horsepower} & \text{TPH} &= \text{tons per hour} \\ \text{lb} &= \text{pound} & \text{TPY} &= \text{tons per year} \end{aligned}$

N/A = not applicable VOC = volatile organic compounds

ND = no data available yr = year

 NO_X = oxides of nitrogen

Inventory reflects maximum allowable emissions for all pollutants based on maximum production and year-round operation (8,760 hours) except for the 200 TPH Drum Mix Asphalt Plant Dryer which is limited to 2,100 hours per year o keep allowable emissions below the Title V threshold and 80 tpy.

Emissions Inventory for the Asphalt Plant permitted by MAQP#3315-03:

Drum Mix Asphalt Plant Dryer - Parallel flow

Maximum Process Rate = 200 ton/hr (Application information)

200 ton/hr

Maximum Hours of Operation = 2,100 hrs/yr

2,100 hrs/yr

Drum Mix Asphalt			
Plant Dryer -			
Counter flow			
PM Emissions			
Emission Factor:	0.04 gr/dscf (permit limit)		
Calculation:	(0.04 gr/dscf) * (39,596 dscfm) * (1 lb / 7000 gr) * (60 min/hr) =	13.58	lb/hr
Calculation:	(13.58 lb/hr) * (2100 hrs/yr) * (0.0005 ton/lb) =	14.25	ton/yr
PM10 Emissions			
Emission Factor:	0.0039 lb/ton (fabric filter, AP 42 Table 11.1-3, 3/04)		
Calculation:	(0.0039 lb/ton) * (39,596 dscfm) * (1 lb / 7000 gr) * (60 min/hr) =	0.82	ton/yr
Calculation:	(0.82 ton/yr) * (2100 hrs/yr) * (0.0005 ton/lb) =	0.00	0.00

CO Emissions:			
Emission Factor:	0.13 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-7, 3/04)		
Calculation:	Calculation: (200 ton/hr) * (2100 hrs/yr) * (0.13 lb/ton) * (ton/2000 lb) =		ton/yr
NOx Emissions			
Emission Factor:	0.055 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-7, 3/04)		
Calculation:	(200 ton/hr) * (2100 hrs/yr) * (0.055 lb/ton) * (ton/2000 lb) =		ton/yr
SO2 Emissions			
Emission Factor:	0.058 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-7, 3/04)		
Calculation:	(200 ton/hr) * (2100 hrs/yr) * (0.058 lb/ton) * (ton/2000 lb) =	12.18	ton/yr
TOC Emissions:			
Emission Factor:	0.044 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-8, 3/04)		
Calculation:	(200 ton/hr) * (2100 hrs/yr) * (0.044 lb/ton) * (ton/2000 lb) =		ton/yr
CH4 Emissions:			
Emission Factor:	0.012 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-8, 3/04)		
Calculation:	(200 ton/hr) * (2100 hrs/yr) * (0.012 lb/ton) * (ton/2000 lb) =	2.52	ton/yr
VOC Emissions:			
Emission Factor:	0.032 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-8, 3/04)		
Calculation:	(200 ton/hr) * (2100 hrs/yr) * (0.032 lb/ton) * (ton/2000 lb) =		ton/yr
Total HAPs Emission	ons:		
Emission Factor:	0.01 lb/ton (waste oil-fired dryer with fabric filter, AP 42, Table 11.1-10, 3/04)		
Calculation:	(200 ton/hr) * (2100 hrs/yr) * (0.01 lb/ton) * (ton/2000 lb) =	2.10	ton/yr

Cold Aggregate Piles

PM Emissions

Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.

Emission

Factor: $k (0.0032) * (U/5)^1.3 * (M/2)^-1.4 = 0.00794 lb/ton$

Where k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06)

U = mean wind speed = 9.3 mph (11-3 Aggregate Pile Forming 8/15) M = material moisture content = 1.5% (11-3 Aggregate Pile Forming 8/15)

Control Efficiency = 0% (Water or chemical spray)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00794 lb/ton) * (ton/2000 lb) * (1 pile) * (1 - 0/100) = **6.95** ton/yr

PM₁₀ Emissions

Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.

Emission

Factor: $k (0.0032) * (U/5)^1.3 * (M/2)^-1.4 = 0.00375 lb/ton$

Where k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06)

U = mean wind speed = 9.3 mph (11-3 Aggregate Pile Forming 8/15) M = material moisture content = 1.5% (11-3 Aggregate Pile Forming 8/15)

Control Efficiency = 0% (Water or chemical spray)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00375 lb/ton) * (ton/2000 lb) * (1 pile) * (1 - 0/100) = 3.29 ton/yr

Conveyors

PM Emissions

Emission

Factor: 0.00014 lb/ton (0.0030 uncontrolled, 0.00014 controlled, AP 42, Table 11.19.2-2, 8/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (3 transfers) = 0.37 ton/yr

PM₁₀ Emissions

Emission

Factor: 0.000046 lb/ton (0.00110 uncontrolled, 0.000046 controlled, AP 42, Table 11.19.2-2, 8/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (3 transfers) = **0.12 ton/yr**

Asphalt Oil Heater

CO Emissions Emission

Factor: 0.0012 lb/gal (AP-42, Section 11.1, Table 11.1-13, No. 2 Fuel Oil, 3/04)

Calculation: (8760 hrs/yr) * (10.00 gal/hr) * (0.0012 lb/gal) * (ton/2000 lb) = **0.05** ton/yr

Asphalt Silo Filling

PM Emissions

Predictive equation for emission factor provided per AP 42, Table 11.1-14, 3/04.

Emission

Factor: $0.000332 + 0.00105(-V)e^{((0.0251)(T + 460) - 20.43)} = 0.00059 \text{ lb/ton}$ Where V = Asphalt volatility = -0.5 (Default value per AP 42, Table 11.1-14, 3/04)

T = HMA mix temperature = 325 F (Default value per AP 42, Table 11.1-14, 3/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00059 lb/ton) * (ton/2000 lb) = 0.51 ton/yr

CO Emissions

Predictive equation for emission factor provided per AP 42, Table 11.1-14, 3/04.

Emission

Factor: $0.00488(-V)e^{((0.0251)(T + 460) - 20.43)} = 0.00118 lb/ton$

Where V = Asphalt volatility = -0.5 (Default value per AP 42, Table 11.1-14, 3/04)

T = HMA mix temperature = 325 F (Default value per AP 42, Table 11.1-14, 3/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00118 lb/ton) * (ton/2000 lb) = 1.03 ton/yr

Product Load Out

PM Emissions

Predictive equation for emission factor provided per AP 42, Table 11.1-14, 3/04.

Emission

Factor: $0.000181 + 0.00141(-V)e^{((0.0251)(T + 460) - 20.43)} = 0.00052 \text{ lb/ton}$ Where V = Asphalt volatility = -0.5 (Default value per AP 42, Table 11.1-14, 3/04)

T = HMA mix temperature = 325 F (Default value per AP 42, Table 11.1-14, 3/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00052 lb/ton) * (ton/2000 lb) = **0.46 ton/yr**

CO Emissions

Predictive equation for emission factor provided per AP 42, Table 11.1-14, 3/04.

Emission

Factor: $0.00558(-V)e^{((0.0251)(T + 460) - 20.43)} = 0.00135 \text{ lb/ton}$

Where V = Asphalt volatility = -0.5 (Default value per AP 42, Table 11.1-14, 3/04)

T = HMA mix temperature = 325 F (Default value per AP 42, Table 11.1-14, 3/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00135 lb/ton) * (ton/2000 lb) = 1.18 ton/yr

V. Existing Air Quality

This permit is for a portable facility to be located in Section 32 South, Township 21 North, Range 4 East in Cascade County, Montana. Cascade County, and in those areas for which this facility is permitted to operate, have been designated unclassified/attainment with all ambient air quality standards, and where there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Furthermore, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and of limited duration.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #3315-03, the Department determined that there will be no impacts from this permitting action. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental
		regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of
		private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to
		exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the
		property?
	X	5. Does the action require a property owner to dedicate a portion of property or to
		grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement
		and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the
		proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider
		economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with
		respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically
		inaccessible, waterlogged or flooded?

YES	NO			
	X	7c. Has government action lowered property values by more than 30% and		
		necessitated the physical taking of adjacent property or property across a public way		
		from the property in question?		
	X	Takings or damaging implications? (Taking or damaging implications exist if YES		
		is checked in response to question 1 and also to any one or more of the following		
		questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or		
		5b; the shaded areas)		

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Analysis Prepared By: R. Payne

Date: 2/1/2019

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Air, Energy & Mining Division Air Quality Bureau 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Missouri River Trucking & Excavating, Inc. dba MRTE, Inc.

Source: Portable Hot-Mix Asphalt Plant

Montana Air Quality Permit (MAQP) Number: #3315-03

EA Draft: 2/15/2019 EA Final: 3/20/2019 Permit Final: 4/5/2019

- 1. Legal Description of Site: Missouri River Trucking & Excavating Inc. (MRTE) proposes to operate at a location currently used for ready-mix concrete batch production. MRTE's home pit is located at Section 32, Township 21 North, Range 4 East, Cascade County, (-111.257817, 47.538457), Montana.
- 2. Description of Project: MRTE is proposing to add a portable drum mix operation with baghouse and initially operate the plant at an existing pit. The permit would include a hot oil heater, parallel flow drum mixer with baghouse, screens, conveyors, and silos. A complete list of the permitted equipment is included in Section I.A of the permit analysis.
- 3. Objectives of Project: Increased business and revenue for MRTE and provide a service to the community in their infrastructure projects. The new facility would provide for asphalt production.
- 4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no action" alternative. The "no action" alternative would deny the issuance of the MAQP to the facility. MRTE would be denied the opportunity to expand their business and provide construction products to the nearby community. Any potential air emission increases that would be authorized by issuing the MAQP would not occur. However, the Department does not consider the "no action" alternative to be appropriate because MRTE has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no action" alternative was eliminated from further consideration. Other alternatives considered were discussed in the Best Available Control Technology analysis.
- 5. *A listing of mitigation, stipulations, and other controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #3315-03.

3315-03 1 Final: 04/05/2019

6. Regulatory effects on private property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The proposed project would allow for operation of a portable asphalt plant. Conditions requiring control mechanisms have been placed within MAQP #3315-03 to ensure that only minor air quality impacts would occur. Additionally, limitations established within MAQP #3315-03 would minimize air pollution. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

B. Water Quality, Quantity, and Distribution

There is a potential for this source to affect water quality, quantity and distribution. Protections are captured in the source's Montana pollutant discharge elimination system (MPDES) permit for this activity. Therefore, the project would have minor impacts to water quality, quantity or distribution in the area.

C. Geology and Soil Quality, Stability, and Moisture

This permitting action would have an effect on geology and soil properties with land disturbances from the facility. The Department determined that there would be impacts from deposition from dispersion characteristics of pollutants and the atmosphere. The impacts would be mitigated through conditions that would be enforced through MAQP #3315-03.

D. Vegetation Cover, Quantity, and Quality

There would be some impacts on existing vegetation cover, quantity and quality as the site is currently used for agriculture. The existing surrounding land is currently industrial in nature. The PM, PM_{10} , and $PM_{2.5}$ emissions from this project may have a minor effect on the surrounding vegetation; however, the air quality permit associated with this project would contain limitations to minimize the effect of the emissions on the surrounding environment.

E. Aesthetics

The permitting of the portable asphalt plant and associated equipment would increase the amount of equipment on the property and create additional noise while in operation. While this may have a minor impact on aesthetics, it is consistent with the type of industrial equipment often used in gravel pits.

F. Air Quality

The air quality of the area would realize minor impacts from the proposed project because the facility would emit the following air pollutants: particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀,) carbon monoxide (CO), oxides of nitrogen (NOx), sulfur dioxide (SO₂), and volatile organic compounds (VOCs). These emissions would be minimized by limitations and conditions that would be included in MAQP #3315-03. While deposition of pollutants would occur because of the new equipment, the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, wind direction, ambient temperature, etc.), and conditions that would be placed in MAQP #3315-03.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department completed a species of concern report through the environmental summary function shared by the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Search results identified many species within the search radius. Species of concern include the American Bittern, American White Pelican, Black-necked Stilt, Brown Creeper, Burrowing Owl, Caspian Tern, Chestnut-collared Longspur, Clark's Grebe, Common Loon, Common Tern, Ferruginous Hawk, Forster's Tern, Franklin's Gull, Great Blue Heron, Horned Grebe, Loggerhead Shrike, Long-billed Curlew, Pacific Wren, Sprague's Pipit, Trumpeter Swan, Greater Short-horned Lizard, Westslope Cutthroat Trout, Chaffweed, Pale-yellow Jewel-weed and Silver Bladderpod. Because potential emission levels are minor, and disturbance is limited, the Department has determined that there will be a minor disturbance to unidentified unique, endangered, fragile, or limited environmental resources in the area.

H. Demands on Environmental Resource of Water, Air, and Energy

The proposed project would have impacts on the demands for the environmental resources of air and water because the facility would be a source of air pollutants and discharge into the local ground water supply. Deposition of pollutants would occur because of operating the facility; however, as explained in Section 7.F of this EA, the Department determined that any impacts on air and water resources from the pollutants (including deposition) would be mitigated by the conditions enforced in MAQP #3315-03. The Department determined that controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard and the ground water supply is protected by the MPDES permit. The Department does not expect any impacts to the energy demand.

I. Historical and Archaeological Sites

The Department contacted the State Historical Preservation Office (SHPO) to disclose any potential to alter historical places or building. SHPO searched the location of the proposed home pit for the asphalt plant and determined that there are no documented records. It is SHPO's position that any structure over fifty years of age is considered

historic. As long as there will be no disturbance or alteration to structures over fifty years of age, SHPO believes there is a low likelihood cultural property would be impacted.

J. Cumulative and Secondary Impacts

The proposed project would cause minor effects on the physical and biological aspects of the human environment because the project would cause an increase in emissions of PM, PM₁₀, CO, VOC, NOx and SO₂ in the proposed area. The conditions in MAQP #3315-03 ensure that air quality impacts would be mitigated. Limitations would be established in the permit to minimize air pollution.

SUMMARY OF COMMENTS ON POTENTIAL SOCIAL AND ECONOMIC EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would not alter the social structure and mores as the current land use is heavy industrial and would be used for industrial purposes. The land is owned by MRTE.

B. Cultural Uniqueness and Diversity

The proposed project would not alter the cultural uniqueness and diversity as the current land use is heavy industrial and would be used for industrial purposes. A concrete batch plant is already in operation at the site and a recycle yard and other industrial sources are nearby.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor impacts to the local and state tax base and tax revenue. The proposed project would necessitate raw material transportation activities. Overall, any impacts to the local and state tax base and tax revenue would be minor.

D. Agricultural or Industrial Production

The land at the proposed location is currently used for industrial purposes and additional industrial facilities exist nearby. There would be increased industrial production in the area due to the operation of the proposed project. No impacts to agricultural productions would be expected as the area surrounding the proposed project is industrial.

E. Human Health

The proposed project would result in minor, if any, impacts to human health. As explained in Section 7.F of this EA, deposition of pollutants would occur; however, the Department determined that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall any impacts to public health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

According to MRTE, there is no access from this site to recreational areas. No impacts to access and quality of recreational and wilderness activities in the project area are anticipated.

G. Quantity and Distribution of Employment

The proposed project would have minor impacts on the quantity and distribution of employment as two new employees would be required to operate the proposed plant. Any impacts to the quantity and distribution of employment would be minor due to the relatively small size of the facility.

H. Distribution of Population

The proposed project would not have impacts on the employment and population of the area as only two new employees would be required for the addition of the new equipment.

I. Demands of Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue MAQP #3315-03 and, in the future, to assure compliance with applicable rules, standards, and conditions that would be contained in MAQP #3315-03. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. Industrial and Commercial Activity

Only minor impacts would be expected on local industrial and commercial activity because the proposed project would represent only a minor increase in the industrial and commercial activity in the area.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #3315-03. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the project is small, any impacts from the facility would be minor.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the asphalt plant, the industrial production, employment, and tax revenue (etc.) impacts resulting from the proposed project would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #3315-03.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for a new asphalt plant and associated equipment. MAQP #3315-03 would include conditions and limitations to ensure the facility would operate in compliance with all applicable air quality rules and regulations. In addition, there are no major effects associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program and the Montana Historical Society

<u>Individuals or groups contributing to this EA</u>: Montana Department of Environmental Quality, Montana Natural Heritage Program, Montana Historical Society

EA prepared by: R. Payne

Date: 2/4/2019